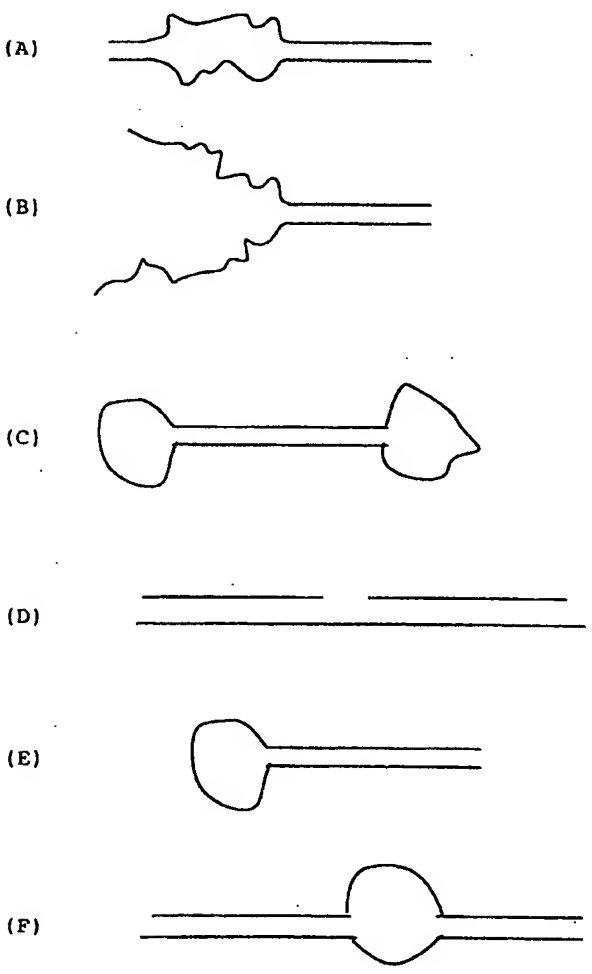


Figure 1 (A-F)

Construct Forms Comprising at Least one Single-Stranded Region

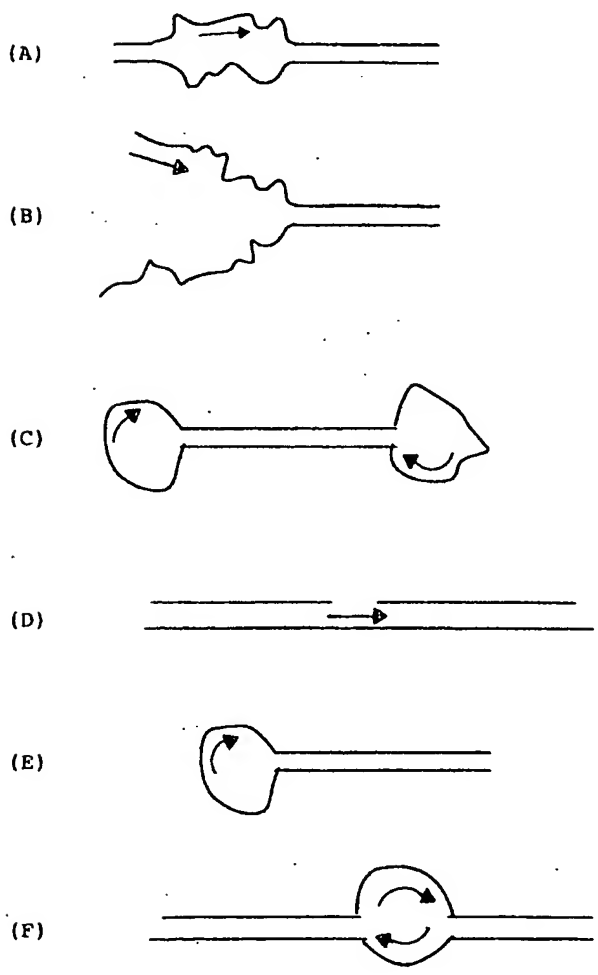


Figure 2 (A-F)

Functional Forms of the Construct

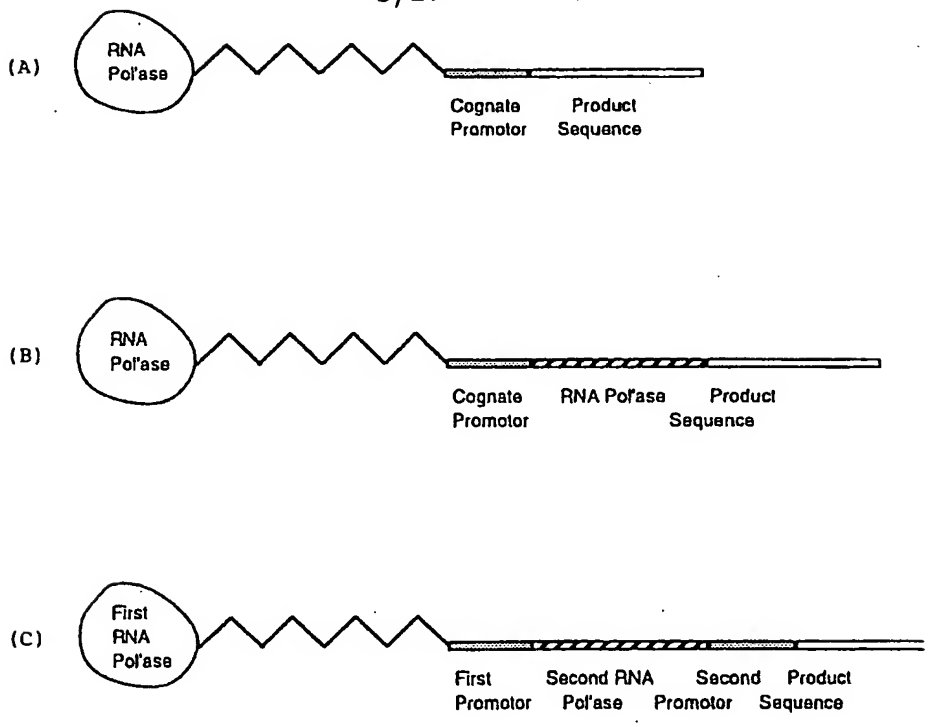


Figure 3 (A-C)

Three Constructs with an RNA Polymerase Covalently Attached to a Transcribing Cassette

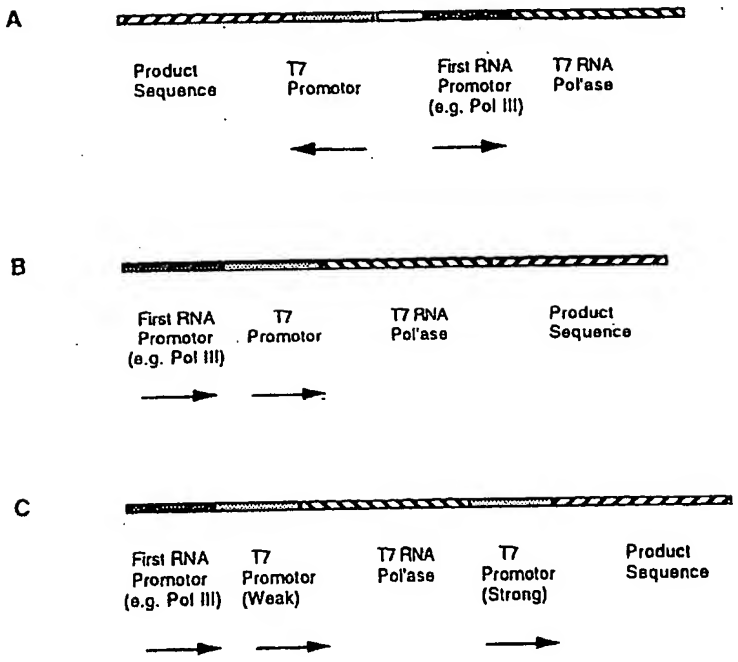


Figure 4 (A-C)

Three Constructs with Promoters for Endogenous RNA Polymerase

M13mp18. Seq Length: 7250

1.	AATGCTACTA	CTATTAGTAG	AATTGATGCC	ACCTTTTCAG	CTCGCGCCCC
51.	AAATGAAAAT	ATAGCTAAAC	AGGTTATTGA	CCATTTGCGA	AATGTATCTA
101.	ATGGTCAAAC	TAAATCTACT	CGTTCGCAGA	ATTGGGAATC	AACTGTTACA
151.	TGGAATGAAA	CTTCCAGACA	CCGTACTTTA	GTTGCATATT	TAAAACATGT
201	TGAGCTACAG	CACCAGATTC	AGCAATTAAG	CTCTAAGCCA	TCCGCAAAAA
251	TGACCTCTTA	TCAAAAGGAG	CAATTAAAGG	TACTCTCTAA	TCCTGACCTG
301.	TTGGAGTTTG	CTTCCGGTCT	GGTTCGCTTT	GAAGCTCGAA	TTAAAACGCG
351.	ATATTTGAAG	TCTTTCGGGC	TTCCTCTTAA	TCTTTTTGAT	GCAATCCGCT
401.	TTGCTTCTGA	CTATAATAGT	CAGGGTAAAG	ACCTGATTTT	TGATTTATGG
451.	TCATTCTCGT	TTTCTGAACT	GTTTAAAGCA	TTTGAGGGGG	ATTCAATGAA
501.	TATTTATGAC	GATTCCGCAG	TATTGGACGC	TATCCAGTCT	AAACATTTTA
551.	CTATTACCCC	CTCTGGCAAA	ACTTCTTTTG	CAAAAGCCTC	TCGCTATTTT
601.	GGTTTTTATC	GTCGTCTGGT	AAACGAGGGT	TATGATAGTG	TTGCTCTTAC
651.	TATGCCTCGT	AATTCCTTTT	GGCGTTATGT	ATCTGCATTA	GTTGAATGTG
701.	GTATTCCTAA	ATCTCAACTG	ATGAATCTTT	CTACCTGTAA	TAATGTTGTT
751.	CCGTTAGTTC	GTTTTATTAA	CGTAGATTTT	TCTTCCCAAC	GTCCTGACTG
801.	GTATAATGAG	CCAGTTCTTA	AAATCGCATA	AGGTAATTCA	CAATGATTAA
851.	AGTTGAAATT	AAACCATCTC	AAGCCCAATT	TACTACTCGT	TCTGGTGTTC
901.	TCGTCAGGGC	AAGCTTATT	CACTGAATGA	GCAGCTTTGT	TACGTTGATT
951.	TGGGTAATGA	ATATCCGGTT	CTTGTCGAAG	ATTACTCTTG	ATGAAGGTCA
1001	GCCAGCCTAT	GCGCCTGGTC	TGTACACCGT	TCATCTGTCC	TCTTTCAAAG
1051	TTGGTCAGTT	CGGTTCCCTT	ATGATTGACC	GTCTGCGCCT	CGTTCCGGCT
1101	AAGTAACATG	GAGCAGGTCG	CGGATTTCGA	CACAATTTAT	CAGGCGATGA
1151	TACAAATCTC	CGTTGTACCTT	TGTTTCGCGC	TTGGTATAAT	CGCTGGGGGT
1201	CAAAGATGAG	TGTTTTAGTG	TATTCTTTCG	CCTCTTTCGT	TTTAGGTTGG

Figure 5

M13mp18 Nucleic Acid Sequence

1251 TGCCTTCGTA GTGGCATTAC GTATTTTACC CGTTTAATGG AAACTTCCTC
1301 ATGAAAAAGT CTTTAGTCCT CAAAGCCTCT GTAGCCGTTG CTACCCTCGT
1351 TCCGATGCTG TCTTTCGCTG CTGAGGGTGA CGATCCCGCA AAAGCGGCCT
1401 TTAACTCCCT GCAAGCCTCA GCGACCGAAT ATATCGGTTA TGCGTGGGCG
1451 ATGGTTGTTG TCATTGTCGG CGCAACTATC GGTATCAAGC TGTTTAAGAA
1501 ATTCACCTCG AAAGCAAGCT GATAAACCGA TACAATTAAA GGCTCCTTTT
1551 GGAGCCTTTT TTTTTGGAGA TTTTCAACGT GAAAAAATTA TTATTCGCAA
1601 TTCCTTTAGT TGTTCCTTTC TATTCTCACT CCGCTGAAAC TGTTGAAAGT
1651 TGTTTAGCAA AACCCCATAC AGAAAATTCA TTTACTAACG TCTGGAAAGA
1701 CGACAAAACT TTAGATCGTT ACGCTAACTA TGAGGGTTGT CTGTGGAATG
1751 CTACAGGCGT TGTAGTTTGT ACTGGTGACG AAACTCAGTG TTACGGTACA
1801 TGGGTTCCTA TTGGGCTTGC TATCCCTGAA AATGAGGGTG GTGGCTCTGA
1851 GGGTGGCGGT TCTGAGGGTG GCGGTTCTGA GGGTGGCGGT ACTAAACCTC
1901 CTGAGTACGG TGATACACCT ATTCCGGGCT ATACTTATAT CAACCCTCTC
1951 GACGGCACTT ATCCGCCTGG TACTGAGCAA AACCCGCTA ATCCTAATCC
2001 TTCTCTTGAG GAGTCTCAGC CTCTTAATAC TTTCATGTTT CAGAATAATA
2051 GGTTCCGAAA TAGGCAGGGG GCATTAACTG TTTATACGGC CACTGTTACT
2101 CAAGGCACTG ACCCCGTTAA AACTTATTAC CAGTACACTC CTGTATCATC
2151 AAAAGCCATG TATGACGCTT ACTGGAACGG TAAATTCAGA GACTGCGCTT
2201 CAAGGCACTG ACCCCGTTAA AACTTATTAC CAGTACACTC CTGTATCATC
2151 AAAAGCCATG TGCCTCAACC TCCTGTCAAT GCTGGCGGCG GCTCTGGTGG
2201 TCCATTCTGG CTTTAATCAA GATCCATTCG TTTGTGAATA TCAAGGCCAA
2251 TCGTCTGACC TGCCTCAACC TCCTGTCAAT GCTGGCGGCG GCTCTGGTGG
2301 TGGTTCTGGT GGCGGCTCTG AGGGTGGTGG CTCTGAGGGT GGCGGTTCTG
2351 AGGGTGGCGG CTCTGAGGGA GGCGGTTCCG GTGGTGGCTC TGGTTCCGGT
2401 GATTTTGATT ATGAAAAGAT GGCAAACGCT AATAAGGGGG CTATGACCGA
2451 AAATGCCGAT GAAAACGCGC TACAGTCTGA CGCTAAAGGC AAACTTGATT

Figure 5

M13mp18 Nucleic Acid Sequence

2501 CTGTCGCTAC TGATTACGGT GCTGCTATCG ATGGTTTCAT TGGTGACGTT
2551 TCCGGCCTTG CTAATGGTAA TGGTGCTACT GGTGATTTTG CTGGCTCTAA
2601 TTCCCAAATG GCTCAAGTCG GTGACGGTGA TAATTCACCT TTAATGAATA
2651 ATTTCCGTCA ATATTTACCT TCCCTCCCTC AATCGGTTGA ATGTCGCCCT
2701 TTTGTCTTTA GCGCTGGTAA ACCATATGAA TTTTCTATTG ATTGTGACAA
2751 AATAAACTTA TTCCGTGGTG TCTTTGCGTT TCTTTTATAT GTTGCCACCT
2801 TTATGTATGT ATTTTCTACG TTTGCTAACA TACTGCGTAA TAAGGAGTCT
2851 TTATCATGCC AGTTCTTTTG GGTATTCCGT TATTATTGCG TTTCCTCGGT
2901 TTCCTTCTGG TAACTTTGTT CGGCTATCTG CTTACTTTTC TTAAAAAGGG
2951 CTTCGGTAAG ATAGCTATTG CTATTTCATT GTTTCTTGCT CTTATTATTG
3001 GGCTTAACTC AATTCTTGTG GGTTATCTCT CTGATATTAG CGCTCAATTA
3051 CCCTCTGACT TTGTTCAGGG TGTTCAGTTA ATTCTCCCGT CTAATGCGCT
3101 TCCCTGTTTT TATGTTATTC TCTCTGTAAA GGCTGCTATT TTCATTTTTG
3151 ACGTTAAACA AAAAATCGTT TCTTATTTGG ATTGGGATAA ATAATATGGC
3201 TGTTTATTTT GTAACTGGCA AATTAGGCTC TGGAAAGACG CTCGTTAGCG
3251 TTGGTAAGAT TCAGGATAAA ATTGTAGCTG GGTGCAAAAT AGCAACTAAT
3301 CTTGATTTAA GGCTTCAAAA CCTCCCGCAA GTCGGGAGGT TCGCTAAAAC
3351 GCCTCGCGTT CTTAGAATAC CGGATAAGCC TTCTATATCT GATTTGCTTG
3401 CTATTGGGCG CGGTAATGAT TCCTACGAATG AAAATAAAAA CGGCTTGCTT
3451 GTTCTCGATG AGTGCGGTAC TTGGTTTAAT ACCCGTTCTT GGAATGATAA
3501 GGAAAGACAG CCGATTATTG ATTGGTTTCT ACTGCTCGT AAATTAGGAT
3551 GGGATATTAT TTTTCTTGTT CAGGACTTAT CTATTGTTGA TAAACAGGCG
3601 CGTTCTGCAT TAGCTGAACA TGTTGTTTAT TGTCGTCGTC TGGACAGAAT
3651 TACTTTACCT TTTGTCGGTA CTTTATATTC TCTTATTACT GGCTCGAAAA
3701 TGCCTCTGCC TAAATTACAT GTTGCGCGTTG TTAAATATGG CGATTCTCAA
3751 TTAAGCCCTA CTGTTGAGCG TTGGCTTTAT ACTGGTAAGA ATTTGTATAA
3801 CGCATATGAT ACTAAACAGG CTTTTTCTAG TAATTATGAT TCCGGTGTTT

Figure 5

M13mp18 Nucleic Acid Sequence

3851 ATTCTTATTT AACGCCTTAT TTATCACACG GTCGGTATTT CAAACCATTA
3901 AATTTAGGTC AGAAGATGAA ATTAACTAAA ATAATATTGA AAAAGTTTTC
3951 TCGCGTTCTT TGTCTTGCGA TTGGATTTGC ATCAGCATTT ACATATAGTT
4001 ATATAACCCA ACCTAAGCCG GAGGTTAAAA AGGTAGTCTC TCAGACCTAT
4051 GATTTTGATA AATTCACTAT TGACTCTTCT CAGCGTCTTA ATCTAAGCTA
4101 TCGCTATGTT TTCAAGGATT CTAAGGGAAA ATTAATTAAT AGCGACGATT
4151 TACAGAAGCA AGGTTATTCA CTCACATATA TTGATTTATG TACTGTTTCC
4201 ATTAAAAAAG GTAATTCAAA TGAAATTGTT AAATGTAATT AATTTTGTTT
4251 TCTTGATGTT TGTTTCATCA TCTTCTTTTG CTCAGGTAAT TGAAATGAAT
4301 AATTCGCCTC TGCGCGATTT TGTAACTTGG TATTCAAAGC AATCAGGCGA
4351 AATCCGTTATT GTTTCTCCCG ATGTAAAAGG TACTGTTACT GTATATTCAT
4401 CTGACGTTAA ACCTGAAAAT CTACGCAATT TCTTTATTTC TGTTTTACGT
4451 GCTAATAATT TTGATAATGGT TGGTTCAATT CCTTCCATAA TTCAGAAGTA
4501 TAATCCAAAC AATCAGGATT ATATTGATGA ATTGCCATCA TCTGATAATC
4551 AGGAATATGA TGATAATTCC GCTCCTTCTG GTGGTTTCTT TGTTCCGCAA
4601 AATGATAATG TTACTCAAAC TTTTAAAATT AATAACGTTC GGGCAAAGGA
4651 TTTAATACGA GTTGTCGAAT TGTTTGTAAA GTCTAATACT TCTAAATCCT
4701 CAAATGTATT ATCTATTGAC GGCTCTAATC TATTAGTTGT TAGTGCTCCT
4751 AAAGATATTT TAGATAACCT TCCTCAATTC CTTTCTACTG TTGATTTGCC
4801 AACTGACCAG ATATTGATTG AGGGTTTGAT ATTTGAGGTT CAGCAAGGTG
4851 ATGCTTTAGA TTTTTCATTT GCTGCTGGCT CTCAGCGTGG CACTGTTGCA
4901 GGCGGTGTTA ATACTGACCG CCTCACCTCT GTTTTATCTT CTGCTGGTGG
4951 TTCGTTCGGT ATTTTTAATG GCGATGTTTT AGGGCTATCA GTTCGCGCAT
5001 TAAAGACTAA TAGCCATTCA AAAATATTGT CTGTGCCACG TATTCTTACG
5051 CTTTCAGGTC AGAAGGGTTC TATCTCTGTT GGCCAGAATG TCCCTTTTAT
5101 TAAAGACTAA TAGCCATTCA AAAATATTGT CTGTGCCACG TATTCTTACG
5151 CGATTGAGCG TCAAAATGTA GGTATTTCCA TGAGCGTTTT TCCTGTTGCA

Figure 5

M13mp18 Nucleic Acid Sequence

5201 ATGGCTGGCG GTAATATTGT TCTGGATATT ACCAGCAAGG CCGATAGTTT
5251 GAGTTCTCT ACTCAGGCAA GTGATGTTAT TACTAATCAA AGAAGTATTG
5301 CTACAACGGT TAATTTGCGT GATGGACAGA CTCTTTTACT CGGTGGCCTC
5351 ACTGATTATA AAAACACTTC TCAAGATTCT GGCGTACCGT TCCTGTCTAA
5401 AATCCCTTTA ATCGGCCTCC TGTTTAGCTC CCGCTCTGAT TCCAACGAGG
5451 AAAGCACGTT ATACGTGCTC GTCAAAGCAA CCATAGTACG CGCCCTGTAG
5501 CGGCGCATTA AGCGCGGCGG GTGTGGTGGT TACGCGCAGC GTGACCGCTA
5551 CACTTGCCAG CGCCCTAGCG CCCGCTCCTT TCGCTTTCTT CCCTTCCTTT
5601 CTCGCCACGT TCGCCGGCTT TCCCCGTCAA GCTCTAAATC GGGGGCTCCC
5651 TTTAGGGTTC CGATTTAGTG CTTTACGGCA CCTCGACCCC AAAAAACTTG
5701 ATTTGGGTGA TGGTTCACGT AGTGGGCCAT CGCCCTGATA GACGGTTTTT
5751 CGCCCTTTGA CGTTGGAGTC CACGTTCTTT AATAGTGGAC TCTTGTTCCA
5801 AACTGGAACA ACACTCAACC CTATCTCGGG CTATTCTTTT GATTTATAAG
5851 GGATTTTGCC GATTTCGGAA CCACCATCAA ACAGGATTTT CGCCTGCTGG
5901 GGCAAACCAG CGTGGACCGC TTGCTGCAAC TCTCTCAGGG CCAGGCGGTG
5951 AAGGGCAATC AGCTGTTGCC CGTCTCGCTG GTGAAAAGAA AAACCACCCT
6001 GGCGCCCAAT ACGCAAACCG CCTCTCCCCG CGCGTTGGCC GATTCATTAA
6051 TGCAGCTGGC ACGACAGGTT TCCCGACTGG AAAGCGGGCA GTGAGCGCAA
6101 CGCAATTAAT GTGAGTTAGC TCACTCATTA GGCACCCCAG GCTTTACACT
6151 TTATGCTTCC GGCTCGTATG TTGTGTGGAA TTGTGAGCGG ATAACAATTT
6201 CACACAGGAA ACAGCTATGA CCATGATTAC GAATTCGAGC TCGGTACCCG
6251 GCGATCCTCT AGAGTCGACC TGCAGGCATG CAAGCTTGGC ACTGGCCGTC
6301 GTTTTACAAC GTCGTGACTG GGAAAACCCT GGCGTTACCC AACTTAATCG
6351 CCTTGCAGCA CAATCCCCTT TCGCCAGCTG GCGTAATAGC GAAGAGGCCC
6401 GCACCGATCG CCCTTCCCAA CAGTTGCGCA GCCTGAATGG CGAATGGCGC
6451 TTTGCCTGGT TTCCGGCACC AGAAGCGGTG CCGGAAAGCT GGCTGGAGTG
6501 CGATCTTCCT GAGGCCGATA CGGTCGTCGT CCCCTCAAAC TGGCAGATGC

Figure 5

M13mp18 Nucleic Acid Sequence

6551 ACGGTTACGA TGCGCCCATC TACACCAACG TAACCTATCC CATTACGGTC
6601 AATCCGCCGT TTGTTCCCAC GGAGAATCCG ACGGGTTGTT ACTCGCTCAC
6651 ATTTAATGTT GATGAAAGCT GGCTACAGGA AGGCCAGACG CGAATTATTT
6701 TTGATGGCGT TCCTATTGGT TAAAAAATGA GCTGATTTAA CAAAAATTTA
6751 ACGCGAATTT TAACAAAATA TTAACGTTTA CAATTTAAAT ATTTGCTTAT
6801 ACAATCTTCC TGTTTTTGGG GCTTTTCTGA TTATCAACCG GGGTACATAT
6851 GATTGACATG CTAGTTTTAC GATTACCGTT CATCGATTCT CTTGTTTGCT
6901 CCAGACTCTC AGGCAATGAC CTGATAGCCT TTGTAGATCT CTCAAAAATA
6951 GCTACCCTCT CCGGCATGAA TTTATCAGCT AGAACGGTTG AATATCATAT
7001 TGATGGTGAT TTGACTGTCT CCGGCCTTTC TCACCCTTTT GAATCTTTAC
7051 CTACACATTA CTCAGGCATT GCATTTAAAA TATATGAGGG TTCTAAAAAT
7101 TTTTATCCTT GCGTTGAAAT AAAGGCTTCT CCCGCAAAAG TATTACAGGG
7151 TCATAATGTT TTTGGTACAA CCGATTTAGC TTTATGCTCT GAGGCTTTAT

Figure 5

M13mp18 Nucleic Acid Sequence

COMPLEMENTARY TO M_{13}

POSITION	5' 3'	POSITION	
645	AGCAACACTATCATA	631	$M_{13}/1$
615	ACGACGATAAAAACC	601	$M_{13}/2$
585	TTTTGCAAAAGAAGT	571	$M_{13}/3$
555	AATAGTAAAATGTTT	541	$M_{13}/4$
525	CAATACTGCGGAATG	511	$M_{13}/5$
495	TGAATCCCCCTCAAA	481	$M_{13}/6$
465	AGAAAACGAGAATGA	451	$M_{13}/7$
435	CAGGTCTTTACCCTG	421	$M_{13}/8$
405	AGGAAAGCGGATTGC	391	$M_{13}/9$
375	AGGAAGCCCGAAAGA	361	$M_{13}/10$

COMPLEMENTARY TO SS PHAGE DNA

POSITION	5' 3'	POSITION	
351	ATATTTGAAGTCTTT	366	$M_{13}/11$
371	TCTTTTTGATGCAAT	386	$M_{13}/12$
391	CTATAATACTCAGGG	406	$M_{13}/13$
411	TGATTTATGGTCATT	426	$M_{13}/14$
431	GTTTAAAGCATTTGA	446	$M_{13}/15$
451	TATTTATGACGATTC	466	$M_{13}/16$
471	TATCCAGTCTAAACA	486	$M_{13}/17$
491	CTCTGGCAAAACTTC	506	$M_{13}/18$
511	TCGCTATTTTGGTTT	526	$M_{13}/19$
531	AAACGAGGGTTATGA	546	$M_{13}/20$

Figure 6

Primers for Nucleic Acid Production Derived from M13mp18 Sequence

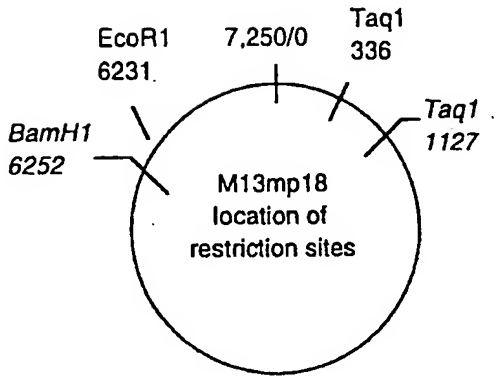
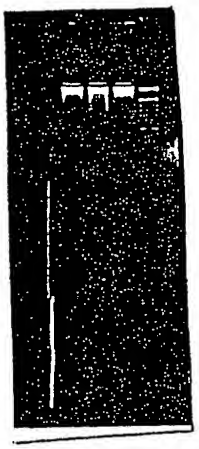


Figure 7

Appropriate M13mp18 Restriction Sites

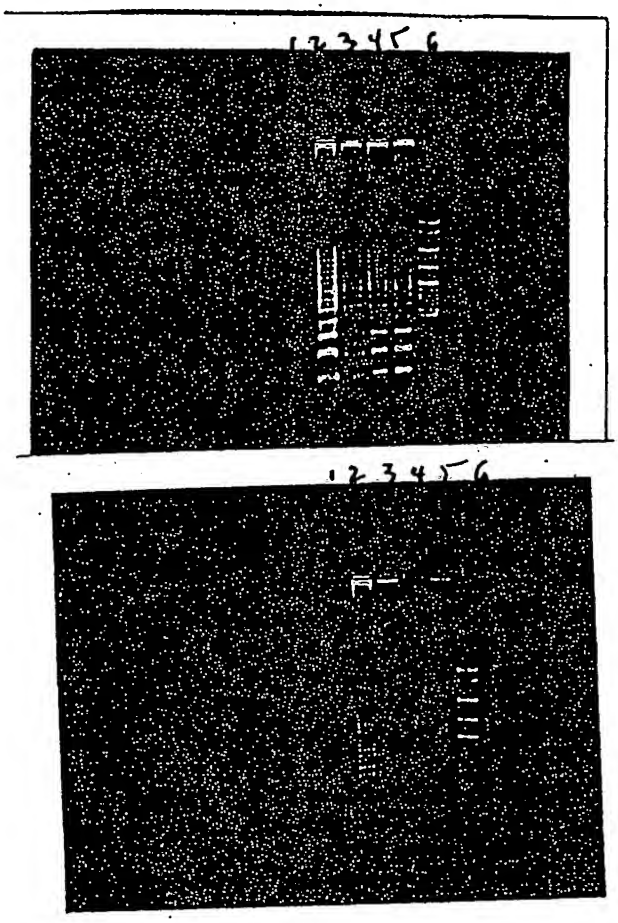


Lane 1: from calf thymus + Taq digested mp18 amplification reaction
Lane 2: from Taq digested mp18 amplification reaction
Lane 3: from calf thymus amplification reaction
Lane 4: øX174 Hinf1 size marker

Figure 8

Lane 1: no template
Lane 2: mp18 template, phosphate buffer
Lane 3: MspI/pBR322 size marker
Lane 4: mp18 template, MOPS buffer

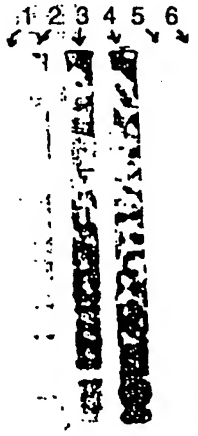
Figure 9



Top= (+) Template
Bottom= (-) Template

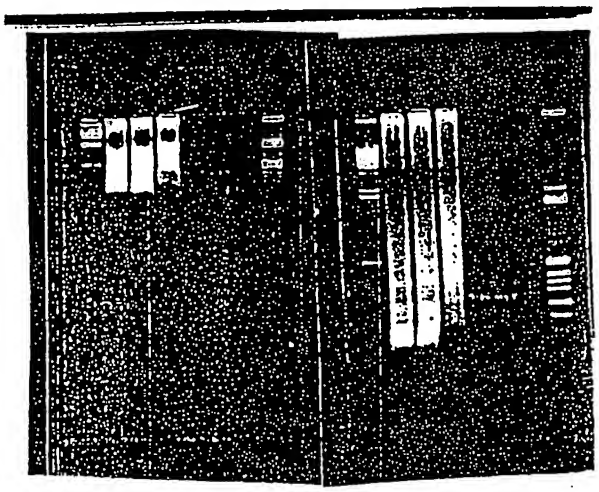
Lane 1: phosphate buffer
Lane 2: MES
Lane 3: MOPS
Lane 4: DMAB
Lane 5: DMG
Lane 6: pBR322/MspI size marker

Figure 10



Lane 1: DMAB buffer, no template
Lane 2: DMAB buffer, mp18 template
Lane 3: DMG buffer, no template
Lane 4: DMG buffer, mp18 template
Lane 5: No reaction
Lane 6: 200 ng Taq I digested mp18 size marker/positive control

Figure 11



First Time Interval Second Time Interval

Agarose Gel Analysis

Lane 1: lambda Hind III marker
Lane 2: Amp/Untreated
Lane 3: Amp/Kinased
Lane 4: Amp/Kinased/Ligated
Lane 5: PCR/Untreated
Lane 6: PCR/Kinased
Lane 7: PCR/Kinased/Ligated
Lane 8: øX174/Hinf1 marker

Figure 12

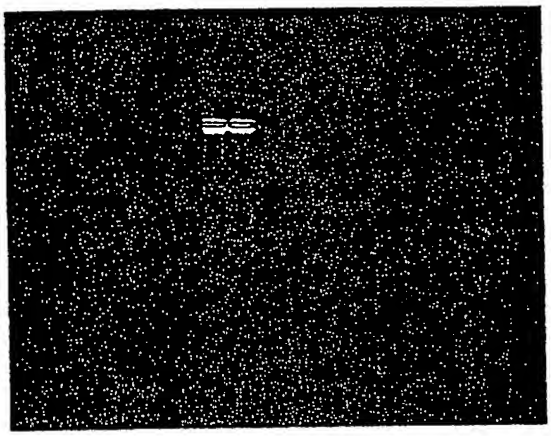
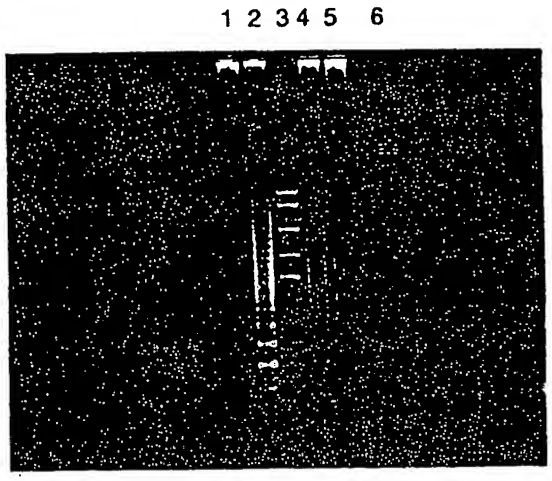
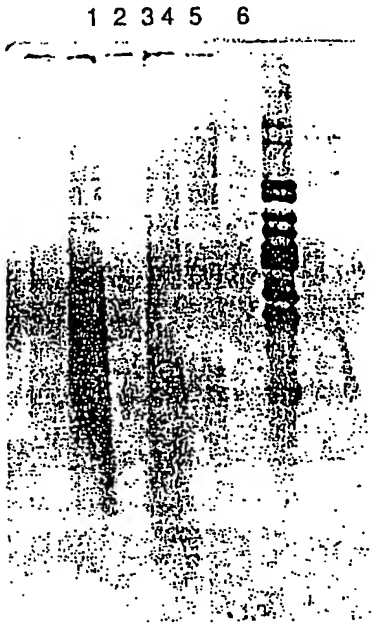


Figure 13



Lane 1: Primers alone
Lane 2: Primers + taq digested M13 DNA
Lane 3: Molecular weight markers
Lane 4: Primers + RNA
Lane 5: Primers alone
Lane 6: M13 digested DNA
Buffer was dimethyl amino glycine, pH 8.6

Figure 14



Lane 1: Primers alone
Lane 2: Primers + taq digested M13 DNA
Lane 3: Molecular weight markers
Lane 4: Primers + RNA
Lane 5: Primers alone
Lane 6: M13 digested DNA
Buffer was dimethyl amino glycine, pH 8.6

Figure 15

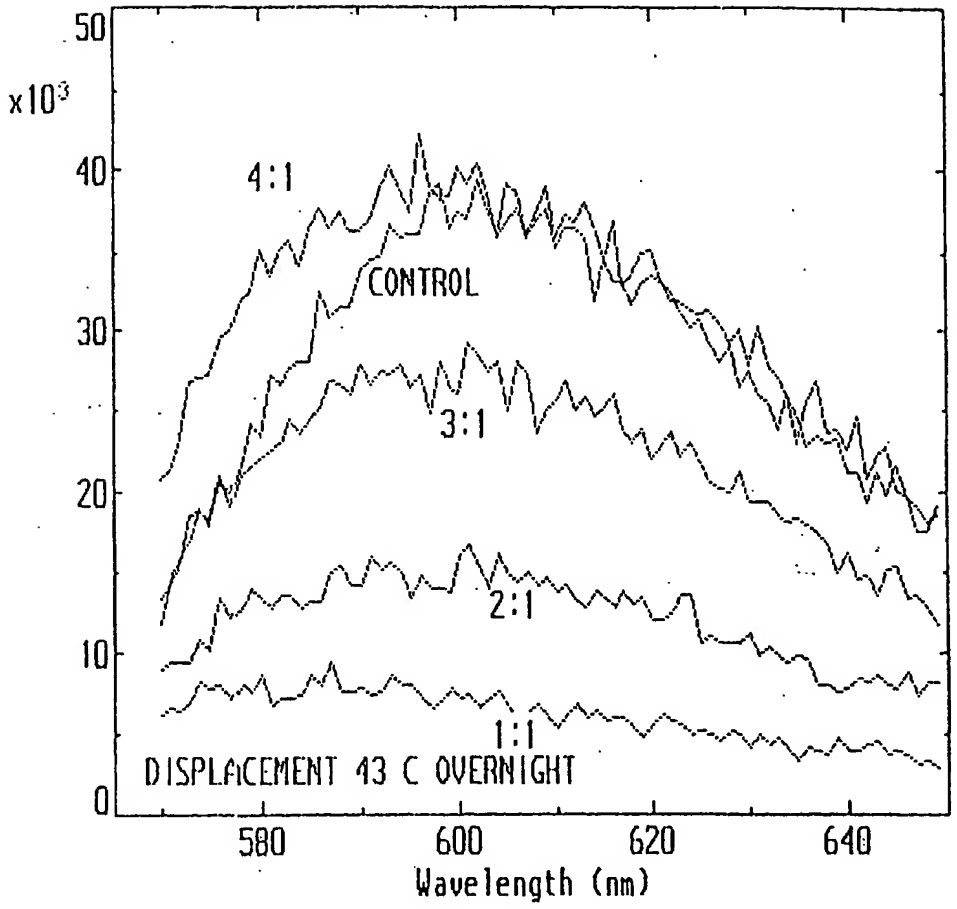

50
x10³
40
30
20
10
0
4:1
CONTROL
3:1
2:1
1:1
DISPLACEMENT 43 C OVERNIGHT
580
600
620
640
Wavelength (nm)

Figure 16

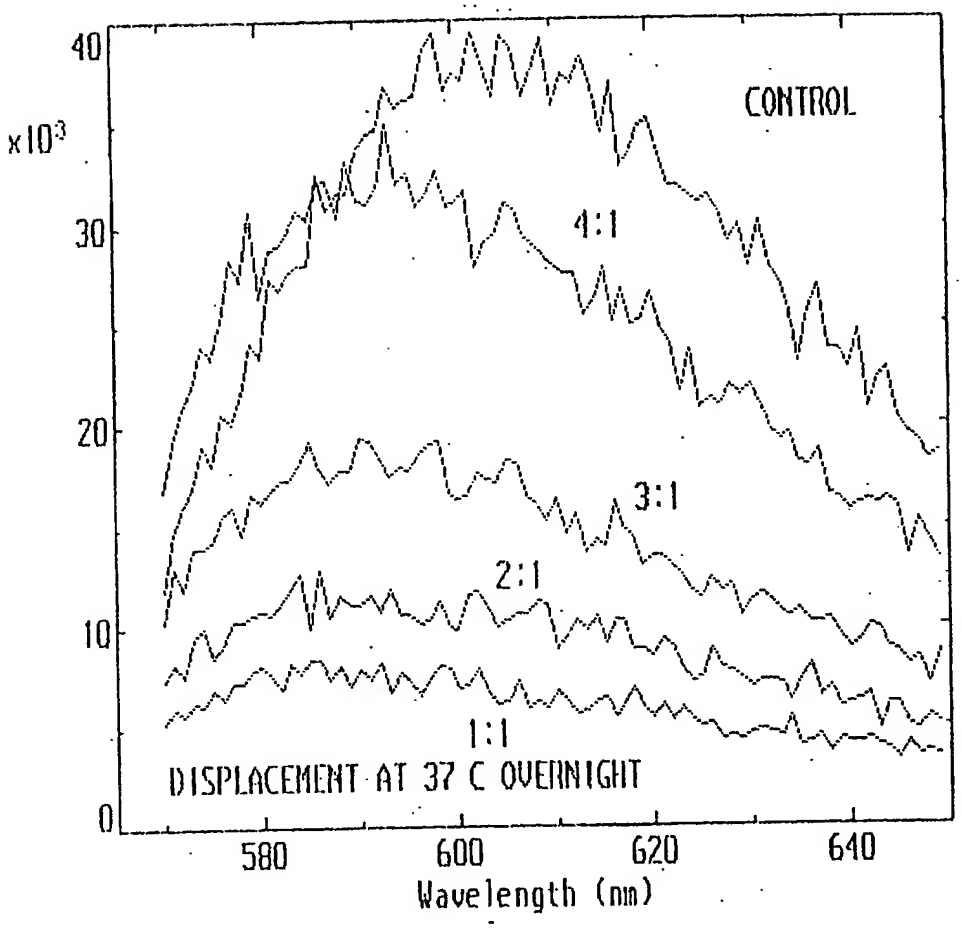

40
30
20
10
0
x10³
CONTROL
4:1
3:1
2:1
1:1
DISPLACEMENT AT 37 C OVERNIGHT
580
600
620
640
Wavelength (nm)

Figure 17

pIBI 31-BH5-2

fmet AUG of Lac z {T7 Promotor region----
LAC PROMOTOR..ATG ACC ATG ATT ACG CCA GAT ATC AAA TTA ATA CGA CTC ACT ATA

oligo 50-mer 3'- tac t*aa t*gc ggt* ct*a t*ag t*Vt aat* tat* gct* gag t*ga t*at* c-5'
10 base insert

T7 RNA Start {«« T3 Promotor Region }
IGGG CTC ICCT TTA GTG ACG GTT AAT
···»») «- T3 Start Signal

pIBI 31 BSII/HCV

fmet AUG of Lac z {T3 Promotor region -») T3 RNA Start
LAC PROMOTOR ..ATG ACC ATG ATT ACG CCA AGC TCG AAA TTA ACC CTC ACT AAA /GGG
oligo 50-mer 3'- tac t*aa t*ac t*aa t*gc ggt* t*V--10 base insert--.....

(«- T7 Promotor Region }
MULTIPLE CLONING SITE + 390 BASE INSERT CTA /TAG TGA GTC CGT ATT AAT....
«- T7 Start Signal
5'-ct*a t*ag t*ga gt*c gt*a tt*a at*.....

Figure 18

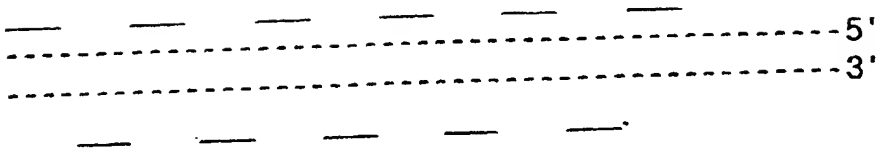
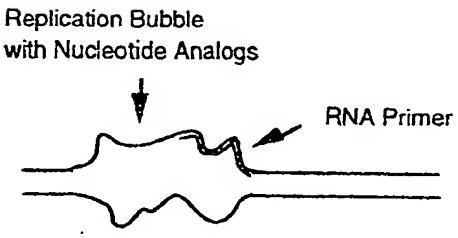


Figure 19



Primer-Dependent DNA Production Using Nucleic Acid Construct

Figure 20

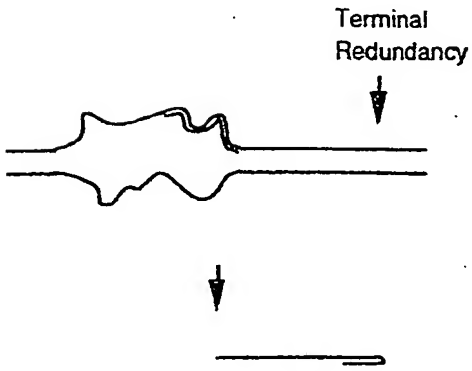
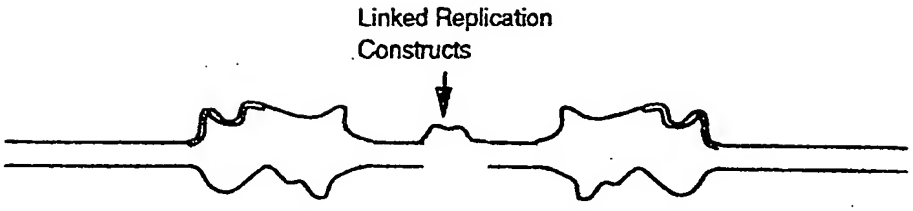
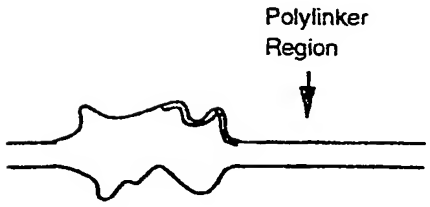


Figure 21



Linked Complementary Production Constructs

Figure 22



Cloning Site in Production Constructs

Figure 23

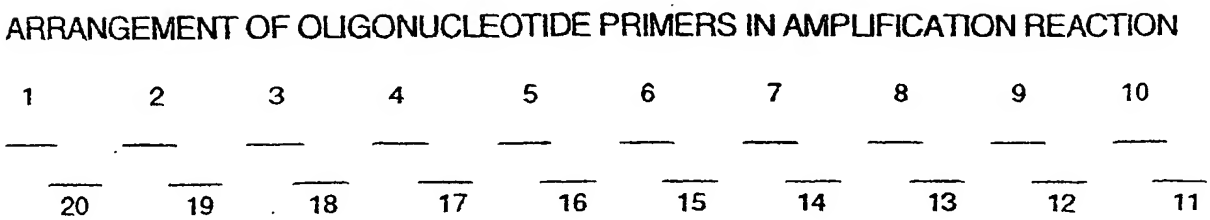

ARRANGEMENT OF OLIGONUCLEOTIDE PRIMERS IN AMPLIFICATION REACTION
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Figure 24